

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

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PCT

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

07-10-2004

Applicant's or agent's file reference
109681

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/NO 2004/000205

International filing date (day/month/year)

02.07.2004

Priority date (day/month/year)

07.07.2003

International Patent Classification (IPC) or both national classification and IPC

H01M 4/88, H01M 4/86, H01M 4/96

Applicant

REVOLT TECHNOLOGY AS et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/SE

Patent- och registreringsverket

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Form PCT/ISA/237 (cover sheet) (January 2004)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/NO 2004/000205

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____ which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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International application No.
PCT/NO 2004/000205

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-22, 24	YES
	Claims	23, 25	NO
Inventive step (IS)	Claims	1-22, 24	YES
	Claims	23, 25	NO
Industrial applicability (IA)	Claims	1-25	YES
	Claims		NO

2. Citations and explanations:

The claimed invention relates to a method of manufacturing a gas diffusion electrode, an electrode manufactured by such a method, a gas diffusion electrode and to the use of the gas diffusion electrode.

The aim of the invention is to provide a process for the production of thin hydrophobic gas diffusion electrodes which is suitable for continuous production lines and which alleviates the problems related to prior art wet and dry preparation methods. For this purpose, the method and electrodes possess the features described in the characterizing part of claims 1, 23 and 24 respectively.

The following documents are cited in the International Search Report:

D1: US 3 457 113 A
D2: US 5 480 735 A
D3: US 6 020 083 A
D4: DE 2 161 373 A
D5: JP 7 078 617 A
D6: JP 7 220 734 A
D7: JP 6 123 397 A

Claims 1-22, 24:

The invention defined in claims 1-22, 24 is not disclosed by any of these documents. The cited documents D1-D7 do not give any indication that would lead a person skilled in the

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: BOX V

art to the claimed method, gas diffusion electrode or use of the same. Therefore, the claimed invention according to claims 1-22, 24 is not obvious to a person skilled in the art. It is also considered to be industrially applicable.

Claims 23, 25:

An independent claim should clearly specify all of the essential features needed to define the invention except in so far as such features are implied in generic terms used (PCT/GL/part II/chapter 5.33). The requirement that the claims shall be clear applies to individual claims and also to the claims as a whole (PCT/GL/part II/chapter 5.31).

Claim 23 in the application is not formulated in a clear and concise manner (PCT Article 6). The claim does not clarify that the electrode described, manufactured by a method according to any of claims 1-22, has properties that distinguish it from electrodes manufactured by other methods, such as the ones described in the documents above. It is not clarified that the product described in claim 23 can only be defined by the process steps according to claims 1-22 by which the product is made. The method described according to claims 1-22 does not give the electrode features which are included in claim 23, where these features distinguish the electrode from prior art.

Therefore, the electrode according to claim 23 and the field of application according to claim 25 lack novelty.